UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,035	08/27/2001	Lane W. Lee	M-12040 US	4896
	7590 03/24/200 N KWOK CHEN & HI	EXAMINER		
2033 GATEWA		DINH, MINH		
SUITE 400 SAN JOSE, CA 95110			ART UNIT	PAPER NUMBER
			2132	
			MAIL DATE	DELIVERY MODE
			03/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	09/940,035	LEE ET AL.
Office Action Summary	Examiner	Art Unit
	MINH DINH	2132
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	ON. imely filed m the mailing date of this communication. IED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 30 № 2a) This action is <b>FINAL</b> . 2b) This 3) Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matters, p	
Disposition of Claims		
4) Claim(s) 25 and 26 is/are pending in the appli 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 25 and 26 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	awn from consideration.	
9)☐ The specification is objected to by the Examin	er.	
10) The drawing(s) filed on is/are: a) acceptable and any objection to the Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the E	e drawing(s) be held in abeyance. So etion is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat*  * See the attached detailed Office action for a list.	nts have been received. Its have been received in Applica prity documents have been receive Tau (PCT Rule 17.2(a)).	ition No ved in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summar Paper No(s)/Mail 5)  Notice of Informal 6)  Other:	Date

## **DETAILED ACTION**

## Response to Amendment

1. This action is in response to the RCE filed 11/30/2007.

## Response to Arguments

2. Applicant's arguments filed 11/30/07 have been fully considered but they are not persuasive. Applicant argues that Mochizuki (7,020,780) teaches no encryption/decryption of the content by either the title key or the cipher key (page 3, 3<sup>rd</sup> paragraph). Although Mochizuki does not explicitly disclose encryption/ decryption of the content file, one of ordinary skill in the art would readily recognize that the feature is implied by the term "cipher key". Even if Mochizuki does not encrypt the content file with the keys, encrypting content is well known in the art, and it would have been obvious to encrypt Mochizuki's content file with the keys to prevent unauthorized access to the plaintext content file.

Applicant argues that Mochizuki does not teach writing the complement key to the disk (page 4, 3<sup>rd</sup> paragraph). Mochizuki discloses writing the complement key (i.e., the cipher key) on the disc (fig. 7, step S42; col. 10, lines 3-7).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki (7,020,780) in view of Sims, III (6,550,011) and Shear et al. (2001/0042043). Mochizuki discloses a method of unlocking a locked file stored in mastered pre-recorded portion on a storage medium, wherein both a title key and a cipher key are needed to unlock the locked file, the title key and the cipher key being functionally equivalent to a content key and a complement key, the mastered pre-recorded portion including the title key but not the cipher key, the storage medium also having an writeable area that is writable by a storage engine, the method comprising: receiving a request from a host device at the storage engine to unlock the locked file; providing the storage engine with the cipher key; and writing the cipher key to the writeable area to unlock the file (Abstract; figures 6-7, 9; col. 8, lines 50-66; col. 10, line 26 col. 11, line 17).

Mochizuki discloses using the title key and the cipher key to unlock the content file. Although Mochizuki does not explicitly disclose encryption/

decryption of the content file using the keys, one of ordinary skill in the art would readily recognize that the feature is implied by the term "cipher key". Even if Mochizuki does not encrypt the content file with the keys, Official Notice is taken that encrypting content is well known in the art, and it would have been obvious to encrypt Mochizuki's content file using the keys to prevent unauthorized access to the plaintext content file.

Mochizuki does not disclose authenticating a host device and authenticating the storage engine with a server. Sims discloses a method of unlocking locked content stored in a storage medium including the steps of authenticating a host device (col. 5, lines 39-59; col. 19, lines 29-49) and authenticating the storage engine with a server (col. 17, lines 1-23). It would have been obvious to modify the Mochizuki method to authenticate the host device and authenticate the storage engine with a server, as taught by Sims, in order to verify that the host device and the storage engine are both authorized devices.

Mochizuki discloses that the host device decrypts the file using the key provided by the engine. Mochizuki does not disclose that the engines itself decrypts the file and then provides the decrypted file content to the host. Shear discloses a secure storage engine (i.e., a disk drive) which decrypts file content and provides the decrypted file content to the host wherein decryption keys are never exposed outside of the engine (fig. 4A;

paragraphs 0081, 0219, 0250-0252). It would have been obvious to modify the Mochizuki method to such that the engines is a secure engine which decrypts the file and provides the decrypted file content to the host but does not expose the decryption keys outside of the engine, as taught by Shears, in order to provide an additional security layer.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki in view of Sims and Shear as applied to claim 25 above, and further in view of Menezes et al ("Handbook of Applied Cryptography"). Sims discloses authenticating the host device requiring two passes (i.e., two messages to be transmitted), but Sims does not disclose using one-pass protocol in which a first entity who generates the random session key is also the entity that encrypts the session key with a second entity's public key and transmits the encrypted session key to the second entity participating in a communication session. Menezes discloses using one-pass protocol for transporting a session key and for implicit key authentication (Section 12.5.1, page 507-508). It would have been obvious to modify the combined method of Mochizuki, Sims and Shear to authenticate the host device using one-pass protocol, as taught by Menezes, in order to reduce network traffic.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH DINH whose telephone number is (571)272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D./ Examiner, Art Unit 2132

3/16/08

/Benjamin E Lanier/ Primary Examiner, Art Unit 2132